

REMARKS

Favorable reconsideration of this application, in light of the following discussion and in view of the present amendment, is respectfully requested.

Claims 1, 6, 11, 25, 40 and 47-49 are amended. Claims 1, 2, 4-7, 9-17, 20-32, 34-44, 46-53 and 55-58 are pending.

I. Rejection under 35 U.S.C. § 103

In the Office Action, at page 4, numbered paragraph 5, claims 1-7, 9-17, 20-31, 34-44, 46-53 and 55-58 were rejected under 35 U.S.C. § 103(a) as being unpatentable over various combinations of U.S. Patent 5,276,436 to Shaw et al., U.S. Patent 5,886,545 to Sakuda et al. and U.S. Patent No. 5,808,693 to Yamashita et al. These rejections are respectfully traversed.

The combination of the teachings of Shaw and Sakuda does not suggest that:

wherein the signal checking unit senses whether an input signal cable is connected to the display device and checks whether the identified input signal is abnormal by decoding the identified input signal when the input signal cable is connected to the display device,

as recited in amended independent claim 1.

Shaw does not discuss or suggest that signal checking unit senses whether an input signal cable is connected to the display device and checks whether the identified input signal is abnormal by decoding the identified input signal when the input signal cable is connected to the display device.

Shaw does not disclose both sensing whether an input signal cable is connected and checking whether the identified input signal is abnormal by decoding the identified input signal when the input signal cable is connected.

Referring to Fig. 6 and col. 9, lines 43-62, for example, Shaw discloses that "after the default settings have been established, the program proceeds to a decision instruction 605 in which a determination is made whether the microprocessor is currently receiving an HSYNC signal from the analog multiplex unit 34. If there is no signal being received, the program proceeds to instruction box 607 to cause the analog multiplex control signal MUX CONTROL to be switched allowing the HSYNC and VSYNC signal from another video signal source to be coupled to the microprocessor 36 [emphasis added]." The analog multiplex unit 34 and the microprocessor 36 are shown in Fig. 3.

In contrast, the present invention of claim 1, for example, receives an input signal, identifies the type of the input signal and checks whether the identified input signal is abnormal by decoding the identified input signal.

The "input signal" of Shaw, alleged to correspond to the "input signal" of claim 1, is a signal from a video cassette recorder 20, personal computer 21, video disc unit 22, video camera 24, television tuner 41 or a television receiver 43. Accordingly, the analog multiplex unit 34 or the microprocessor 36 of Shaw must have a function of checking whether the identified input signal is abnormal by decoding the identified input signal, for example. Thus, to conform with claim 1, which requires receiving an input signal, identifying the type of the input signal and checking whether the identified input signal is abnormal by decoding the identified input signal, for example, Shaw must receive an input signal, identify the type of input signal and check whether the identified input signal is abnormal by decoding the identified input signal.

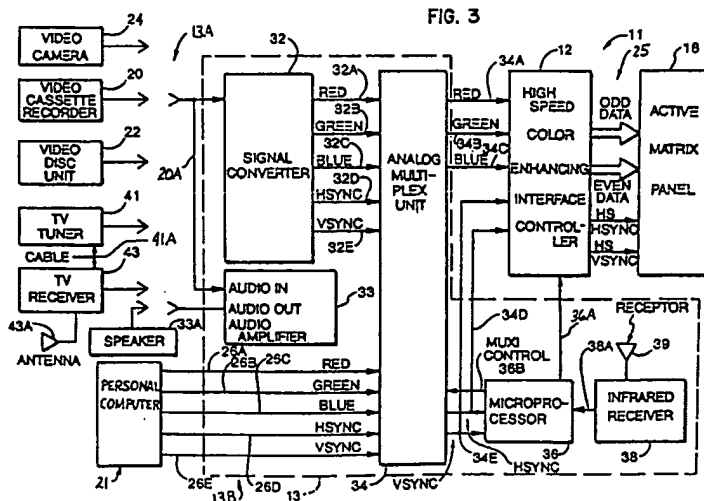
However, the analog multiplex unit 34 cannot have the function of checking whether an identified input signal is abnormal by decoding the identified input signal, because the analog multiplex unit 34 is a conventional multiplexer allowing either the output signals from the signal converter 32 or the output signals from the video drive module 26 to be coupled to the high speed color enhancing interface controller 12 (refer to col. 6, lines 25-26). Further, the microprocessor 36 cannot have the function of checking whether the identified input signal is abnormal by decoding the identified input signal, because the microprocessor 36 only has a function to analyze the period and polarity of the HSYNC and VSYNC signals (see col. 9, lines 67-68). Specifically, analyzing the period and polarity of HSYNC and VSYNC signals is not "decoding the identified input signal," as recited in independent claim 1, because it means the reverse operation for an operation of "encoding" a signal.

Therefore, Shaw does not discuss or suggest decoding the HSYNC and VSYNC signals to check whether the HSYNC and VSYNC signals are abnormal. Thus, Shaw does not disclose receiving an input signal, identifying the type of the input signal, and checking whether the identified input signal is abnormal by decoding the identified input signal, as discussed in independent claim 1.

The Examiner alleges that Shaw does determine the abnormality of the signal by decoding the signal because the sync signal is taken from the signal and thus the signal is decoded.

However, referring to Fig. 3, the signal converter 32 outputs the sync signals 32D, 32E and the microprocessor 36 receives the sync signals via the analog multiplex unit 34. In other words, the microprocessor 36 does not take the sync signal from the signal. The

microprocessor 36 only analyzes the period and polarity of the HSYNC and VSYNC signals, which is the reverse operation of "encoding" a signal.



Sakuda fails to make up for the deficiencies in Shaw.

Therefore, as the combination of the teachings of Shaw and Sakuda does not suggest all the features of independent claim 1, claim 1 patentably distinguishes over the references relied upon. Accordingly, withdrawal of the §103(a) rejection is respectfully requested.

Further, the combination of the teachings of Shaw and Sakuda does not suggest that "the checking comprises sensing whether an input signal cable is connected to the display device and determining whether the identified input signal is abnormal by decoding the input signal when the input signal cable is connected to the display device," as recited in amended independent claim 6. Therefore, claim 6 patentably distinguishes over the references relied upon. Accordingly, withdrawal of the §103(a) rejection is respectfully requested.

Also, the combination of the teachings of Shaw and Sakuda does not suggest that "the signal checking unit senses whether an input signal cable is connected to the display device and checks whether the identified input signal is abnormal by decoding the identified input signal when the input signal cable is connected to the display device," as recited in amended independent claim 11. Therefore, claim 11 patentably distinguishes over the references relied upon. Accordingly, withdrawal of the §103(a) rejection is respectfully requested.

The combination of the teachings of Shaw and Sakuda additionally does not suggest that "the checking comprises sensing whether a signal input cable is connected and decoding the input signal when the signal input cable is connected," as recited in amended independent claim

25. Therefore, claim 25 patentably distinguishes over the references relied upon. Accordingly, withdrawal of the §103(a) rejection is respectfully requested.

In addition, combination of the teachings of Shaw and Sakuda does not suggest that “the signal checking unit senses whether a cable via which each signal is input is connected and checks whether the input signal is normal by decoding the input signal when the cable via which each signal is input is connected,” as recited in amended independent claim 40. Therefore, claim 40 patentably distinguishes over the references relied upon. Accordingly, withdrawal of the §103(a) rejection is respectfully requested.

The combination of the teachings of Shaw and Sakuda further does not suggest that “whether the analog input port receives the normal analog input signal is determined by sensing whether a cable via which each signal is input is connected and decoding the input signal when the cable via which each signal is input is connected,” as recited in amended independent claim 47. Therefore, claim 47 patentably distinguishes over the references relied upon. Accordingly, withdrawal of the §103(a) rejection is respectfully requested.

In addition, the combination of the teachings of Shaw and Sakuda does not suggest that “whether the digital input port receives the normal digital input signal is determined by sensing whether a cable via which each signal is input is connected and decoding the input signal when the cable via which each signal is input is connected,” as recited in amended independent claim 48. Therefore, claim 48 patentably distinguishes over the references relied upon. Accordingly, withdrawal of the §103(a) rejection is respectfully requested.

Also, the combination of the teachings of Shaw and Sakuda does not suggest that “whether the input signal is normal is checked by sensing whether a cable via which each signal is input is connected and decoding the input signal when the cable via which each signal is input is connected,” as recited in amended independent claim 49. Therefore, claim 49 patentably distinguishes over the references relied upon. Accordingly, withdrawal of the §103(a) rejection is respectfully requested.

Claims 2, 4, 5, 7, 9, 10, 12-17, 22-24, 26-31, 36-44, 46, 50-53 and 55-58 depend either directly or indirectly from independent claims 1, 6, 11, 25, 40 and 47-49 and include all the features of their respective independent claims, plus additional features that are not discussed or suggested by the references relied upon. Therefore, claims 2, 4, 5, 7, 9, 10, 12-17, 22-24, 26-31, 36-44, 46, 50-53 and 55-58 patentably distinguish over the references relied upon for at least the reasons noted above. Accordingly, withdrawal of the §103(a) rejection is respectfully requested.

Yamashita fails to make up for the deficiencies in Shaw and Sakuda. Claims 20, 21, 34 and 35 depend either directly or indirectly from independent claims 11 and 25 and include all the features of their respective independent claims, plus additional features that are not discussed or suggested by the references relied upon. Therefore, claims 20, 21, 34 and 35 patentably distinguish over the references relied upon for at least the reasons noted above. Accordingly, withdrawal of the §103(a) rejection is respectfully requested.

Conclusion

In accordance with the foregoing, claims 1, 6, 11, 25, 40 and 47-49 have been amended. Claims 1, 2, 4-7, 9-17, 20-32, 34-44, 46-53 and 55-58 are pending and under consideration.

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

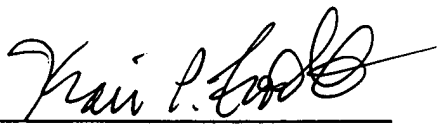
Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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